700 Grand Ave, →

UST Inspection Checklist

Store #2

PART I. OWNER/OPERATOR INFORMATION

1. Facility Name: MLB East Lake Conv. Store
2. Owner: Mille Lacs Band of Ojibwe
3. Operator:
5. Contact Person: Dave Peer
6. UST Site Phone #: 218-768-3344 Store ✓

6. Date of Visit: 11/1/13 7. Marketer: X Non-Marketer:
8. Site Arrival/Departure (Time): 10:00 / 11:15
9. Facility Address: 36040 State Hwy 65
10: Team Members: Jeff Brandon(MPCA), Scott Hansen, Dave Peer(Mgr.), Scott Hansen, Jeff Brandon

PART II. UST SITE INFORMATION

	1	2	3	4	5	6	7
1. Tank #:	1	2	3				
2. Tank Type:	STI	→	→				
3. Piping Type:	Coated Steel	Steel	~~Composite~~				
4. Size of Tank:	10K	6K	4K				
5. Tank Contents:	Unl GAS-Reg	GAS-Prem	Diesel				
6. Install Date:	8/7/2000	→	→				
7. TTT Date:							
8. LTT Date:							
9: LD (Tank):	ATG 350 - VR TLS						
10: LD (Pipe):	ATG 350 - ELLD						
11. Closure Date:							
	Perm__ Temp__	Perm__ Temp__	Perm__ Temp__	Perm__ Temp__	Perm__ Temp__	Perm__ Temp__	Perm__ Temp__
12. Spill:	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__
13. Overfill:	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__
Type:							
14. CP (Tank):	Yes X No__	Yes X No__	Yes X No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__
Date:	9/4/2012	→	Attached		10/3/2013 Attached		
Type:	CP	→	→				
15. CP (Piping):	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__
Date:	3/14/2012	→	Attached				
Type:	CP	→	→				

Functionality 6/4/13 All Pass

16. CP Monitoring: [For all cathodic protection systems (Galvanic Anodes and Impressed Current Systems)]

	1	2	3	4	5	6	7
6 Mo./3 Yrs:	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__
Six Months:	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__
Records:	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__

Note: Monitoring conducted within six month of installation and three years after initial monitoring. [280.31(b)(1)]
Note: Monitoring conducted within six month of any repairs to UST system. [280.33(e)]
Note: Records on file of last two monitoring results. [280.31(d)(2)]

17. CP Monitoring: [For Impressed Current Systems Only]

	1	2	3	4	5	6	7
60 Day Insp.:	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__
Records:	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__	Yes__ No__

Note: System is inspected ever 60 days, involvers reading and recording systems voltage and amperage. [280.31(c)]
Note: Records on file of last three voltage and amperage readings. [280.33(d)(1)]

(3/31/2008)

email CP ✓

UST Inspection Checklist

PART III. RECOMMENDATION(S) & NARRATIVE COMMENTS

1. Further action is recommend/necessary: Yes X No ___

Notes: Operator Training monthly inspections

2. Facility to provide info. on compliance: Yes X No ___

Notes: 2 electrical Boxes in STP

3. Follow-up inspection recommended: Yes X No ___

Notes: ___
[If Yes, state reason(s) why.]

4. Information Request Letter (IRL): Yes ___ No ___ Date: ___

Notes: ___
[If Yes, A Full Narrative Report **is** required along with this checklist]

5. Notice of Violation (NOV): Yes ___ No ___ Date: ___

Notes: ___
[If Yes, A Full Narrative Report **is** required along with this checklist]

6. Field Citation (FC): Yes ___ No ___ Date: ___

Notes: ___
[If Yes, A Full Narrative Report **is** required along with this checklist]

7. Administrative Order (AO): Yes ___ No ___ Date: ___

Notes: ___
[If Yes, A Full Narrative Report **is** required along with this checklist]

8. Refer to State: Yes ___ No ___ Date: ___

Notes: ___
[If Yes, A Full Narrative Report **may** be required along with this checklist]

9. Financial Responsibility (FR): Yes X No ___ Expiration Date: ___

10. Inspector's Remarks: Recommended .2 gph monthly on line leak test.

11. Additional Remarks/Comments: .1 Line Leak Test (Attached)
#1 Unleaded May 2 2013
#2 Prem. May 6 2013
#3 Diesel May 6 2013

Tank Test

Feb. 15, 2013	Pass 1 2 3	Dec 15 2012 Pass
March 28, 2013	Pass	Nov 30 2012 Pass
Jan. 31, 2013	Pass Pass	Oct 4 2012 Pass
		Sept 15 2012 Pass
April 29, 2013	Pass	
May 15, 2013	Pass	
June 15 2013	PASS	
July 12, 2013	Pass	
Aug. 15, 2013	Pass	
Sept. 19, 2013	Pass	
Oct. 15, 2013	Pass	

Scott Hansen — Nov 1, 2013
Inspector Signature — Date

Minnesota Pollution Control Agency

520 Lafayette Road North
St. Paul, MN 55155-4194

UST Cathodic Protection System Evaluation
Galvanic (Sacrificial Anode) Type
Underground Storage Tanks (UST) Program

Doc Type: Compliance Certification

Instructions: Within 30 days, send completed form to Joann Henry, Minnesota Pollution Control Agency (MCPA) at the address above, fax to 651-297-2343, or e-mail joann.henry@state.mn.us.

- **All reports must be submitted regardless of results (pass, fail, or inconclusive)**
- **Incomplete, unsigned, or illegible forms will not be accepted and will be returned.**

1. UST facility

MPCA Site ID #: 121799

Name: East lake Conv.

Address: 35040 Hwy 65

City: Mcgregor Zip code: 55760

County: Aitkin Phone:

Contact name (if different than above):

2. UST owner/operator

Name:

Address:

City State Mn

Zip code: Phone

Contact phone

3. Cathodic Protection (CP) tester information and qualifications

Tester name (print): Brent Banasiuk

Company name: Pump and Meter Service Inc

Address: 11303 Excelsior Blvd.

City Hopkins

State: Mn Zip code: 55343 Phone: 952 933 4800

E-mail bbanasiuk@pump-meter com

National Association of Corrosion Engineers (NACE) international certification #:

Steel Tank Institute (STI) certification #: CP31712

4. Reason survey was conducted (check only one)

☒ Routine - 3 years ☐ Routine - within 6 months of install ☐ 30-day re-survey after fail ☒ Re-survey within 6 months of repair/modification

Date next CP survey must be conducted by (mm/dd/yyyy): 9/1/2015 (Required within 6 months of install or repair, and every 3 years thereafter.)

5. CP tester's evaluation (check only one)

☒ **Pass** All protected structures at this facility pass the CP survey and the continuity survey indicates all protected structures are isolated. It is judged that adequate CP has been provided to the UST system (Complete sections 7 and 8).

☐ **Fail** One or more protected structures at this facility fail the CP survey, and it is judged that adequate CP has not been provided to the UST system. (Complete sections 7 and 8).

☐ **Inconclusive** The remote and the local do not both indicate the same test result on all protected structures (both pass or both fail), or the continuity survey indicates continuous or inconclusive results when compared to non-protected structures. The survey must be evaluated by a corrosion expert (Corrosion Expert to complete section 6).

CP Tester Signature: Brent E. Banasiuk

Date CP survey performed (mm/dd/yyyy): 9/4/2012

6. Corrosion expert's evaluation (if applicable)

The attached survey must be conducted and/or evaluated by a corrosion expert when: a) conducting repairs to metallic structures which are non-factory coated with dielectric material; b) adding supplemental anodes to the tanks and/or piping without following accepted industry standards; c) the local and remote structure-to-soil potential did not result in the same outcome (both pass or both fail); d) the continuity survey indicates one or more of the protected structures are not isolated; e) when required by MPCA (Corrosion Expert to complete sections 7 and 8).

☐ **Pass** All protected structures at this facility have been judged that the adequate CP is provided to the UST system

☐ **Fail** One or more protected structures at this facility fail the CP survey and it is judged that adequate CP has not been provided to the UST system.

Corrosion expert's name (print):

Company name: Phone

NACE Int./PE certification: NACE Int./PE certification #:

CP Expert Signature: Date (mm/dd/yyyy)

7. Criteria applicable to evaluation (check all that apply)

☒ **-850 On** Structure-to-soil potential more negative than -850 millivolts (mV) with the protective current applied

☐ **-850 Off** Structure-to-soil potential more negative than -850 mV with the protective current momentarily interrupted ("Instant Off")

☐ **100 mV** Structure tested exhibits at least 100 mV of cathodic polarization. ("Instant Off" readings minus native /depol readings)

Facility name:

Date of test: 9/4/2012

(Note: The facility name and date of test will automatically populate from page one upon printing, if filled out electronically.)

8. Action required as a result of this evaluation (check only one)

- ☒ **None** — CP is adequate. No further action is necessary at this time. Test again by no later than (see Section 4).
- ☐ **Retest** — CP may not be adequate. Retest within 30 days to determine if passing results can be achieved. (Retests may occur only if all protected structures are isolated from non-protected structures)
- ☐ **Repair & Retest** — CP is not adequate. Repair/modification is necessary within the next 60 days, or permanently close the tank system.

9. CP system repairs and/or modification information

Date of "failing" test: _____ *(mm/dd/yyyy)* Date of repair: 8/9/2012 *(mm/dd/yyyy)* Repair company: Pump and Meter Service Inc

Name of lead repair technician: Brent Banasiuk Phone # 612 363 2190

Certification of repair technician (check all that apply): ☒ Steel Tank Institute ☐ NACE ☐ MPCA certified supervisor

Note: submit failing test results with this report if not already submitted.

Description of Repairs (check all that apply)

- ☒ 1. Supplemental anodes for a sti-P_3® tank
- ☐ 2. Supplemental anodes for metallic pipe which is factory coated with dielectirc material (fusion bonded epoxy or equivilent)

Repairs /modifications for 1 & 2 must be designed by a "corrosion expert" or installed per industry standards. Attach corrosion experts design, or documentation industry standard was followed. (Section 6 must be signed if designed by a corrosion expert.)

- ☐ 3. Supplemental anodes for a non-sti-P_3® tank. (e.g., bare steel)
- ☐ 4. Supplimental anodes for metalic pipe which is non-factory coated with dielectirc material (e.g., galvanized, copper, bare steel, etc.).

Repairs/modifications for 3 & 4 and must be designed and evaluated by a corrosion expert only. Attach a corrosion experts design (Section 6 must be signed.)

- ☐ 5. Isolation of Galvanically protected tanks/piping. (explain in "remarks/other" below)
- ☐ 6. Isolation of non-protected metal pipe segments (e.g., flex connectors) at STP or dispenser sumps (explain in "remarks/other" below).

Remarks/Other: Added 2 anodes to spli tank Premium/Dieselt

10. Galvanic (sacrificial anode) structure to soil potential and continuity survey

Half Cell Placement (testing) on frozen soil, concrete, asphalt, or other paving materials is not acceptable.

Structure to Soil Potentials:

- The half cell must be placed in a minimum of **three locations per tank, and three locations per piping run**. At least one of the reference cell locations must be in the soil directly over the tested structure (local); and at least one must be placed in soil approximately 25 to100 feet away from the structure (remote). The third location is at the discretion of the tester (either local or remote).
- When testing flex connectors only, **two tests points are required for each flex connector**, one local and one remote.
- Both the local and the remote voltage must meet one of the three criteria listed in section 7 in order for the structure to pass. Inconclusive must be indicated when both the local and the remote structure-to-soil potentials do not result in the same outcome (both pass or both fail).
- If the "-850 mV Off" or the "100 mV Polarization" criteria is used for galvanic systems, record structure-to-soil potential readings on the MPCA Impressed Current data sheet or similar form.

Continuity Testing: (Point-to-Point and/or Fixed Cell-Moving Ground)

- Point-to-Point: When conducting this method, the leads of the volt meter are required to contact the two structures being examined to demonstrate isolation or continuity. A half cell is not used for this test method.
- Fixed Cell-Moving Ground: When conducting this method, the half cell must be placed in the soil at a remote location approximately 25 to100 feet away and left undisturbed. The other lead of the meter is moved to structures being evaluated.
- To interpret continuity data for either method compare the difference in voltage of the structures evaluated and use the following guidelines: 1 mV or less = continuous, 1-10 mV= inconclusive, greater than 10 mV = isolated.
- For galvanic systems, the structure that is to be protected must be isolated from all other non-protected metallic structure in order to "pass" the continuity survey.
- If other approved continuity testing methods are used, alter this form or submit the data on a separate sheet.

Facility name:

Date of test: 9/4/2012

(Note: The facility name and date of test will automatically populate from page one upon printing, if filled out electronically.)

Describe soil type and location(s) of remote reference cell placement(s) (e.g., Black Dirt, 30 feet NW of Tank #1 spill bucket):

Remote location #1: 70' feet away grass area

Remote location #2:

Describe soil type(s) of local reference cell placements: Drilled holes @ Fill Area

Structure : (Example) Tank 1

Structure to soil potentials (mV)

Half cell site map code	Half cell placement description	"ON" Voltage
(Ex)1	Local, soil at ATG manway	-1011 mV
(Ex)2	Local, Soil at STP manway	-995 mV
(Ex)R-1	Remote #1	-1042 mV

Structure contact point(s): (Ex)Tank Bottom

Continuity testing (mV)

Structure tested	Point-to-point voltage	Fixed cell remote voltage	Isolated/ Continuous/ Inconclusive
(Ex) ATG Conduit	475 mV		isolated
(Ex) STP conduit		-528 mV	isolated
(Ex) Vent	421 mV		isolated
(Ex) Fill Riser	375 mV	-522 mV	isolated

Overall Structure Results (Structure to soil potentials and continuity): ☒ Pass ☐ Fail ☐ Inconclusive

Structure: 002 Premium/Diesel

002 C-1	Diesel Fill Area	-1163
002 C-2	Premium Fill Area	-1114
002 C-3	Remote	-1119

Diesel Fill	-355	Isolated
Premium Fill	-328	Isolated
ATG Risers	-321/-342	Isolated
ATG Conduits	-198/-229	Isolated

Structure contact point(s): Tank Bottom

Overall Structure Results (Structure to soil potentials and continuity): ☒ Pass ☐ Fail ☐ Inconclusive

Structure: ____

Structure contact point(s):

Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive

Structure: ____

Structure contact point(s):

Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive

Structure: ____

Structure contact point(s):

Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive

Structure: ____

Structure contact point(s):

Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive

Facility name:

Date of test: 9/4/2012

(Note: The facility name and date of test will automatically populate from page one upon printing, if filled out electronically.)

	Structure to soil potentials (mV)			Continuity testing (mV)			
	Half cell site map code	Half cell placement description	"ON" Voltage	Structure tested	Point-to-point voltage	Fixed cell remote voltage	Isolated/ Continuous/ Inconclusive

Structure:

Structure contact point(s):

Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive

Structure:

Structure contact point(s):

Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive

Structure:

Structure contact point(s):

Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive

Structure:

Structure contact point(s):

Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive

Structure:

Structure contact point(s):

Overall Structure Results (Structure to soil potentials and continuity): ☐ Pass ☐ Fail ☐ Inconclusive

Comments/Remarks:

If separate corrosion protection is required on flex connectors, treat each flex as if it were an individual metal pipe.

Attach additional sheets as needed.

Facility name:

Date of test: 9/4/2012

(Note: The facility name and date of test will automatically populate from page one upon printing, if filled out electronically.)

11. Description of UST system

Tank/ Pipe #	Product	Capacity (Gallons)	Tank type[1]	Piping type [2]	Metal Segments at Tank sump [3]	Metal Segments at Dispenser [3]
1	001 Unleaded	10000	Steel	Steel	Steel	Steel
2	002/003 Prem/Dsl	10000	Steel	Steel	Steel	Steel
3	Split Tank					
4						
5						
6						
Ex:	*Premium*	*10,000*	*SW* sti-P3®.	*DW Fiberglass*	*CP w/ anodes*	*In Containment*

1. Indicate if tank is Double Wall (DW) or Single Wall (SW). Also indicated type (e.g., steel, fiberglass, sti-P3®, composite etc.) Also indicate if tank is compartmental if applicable
2. Indicate if piping is Double Wall (DW) or Single Wall (SW). Also indicate type (e.g., coated steel, fiberglass, galvanized, flex, etc.)
3. Indicate how metal segments such as flex connectors or metal pipe segments are protected from corrosion (e.g., isolated, booted, bonded, CP w/anodes, in containment, etc.)

12. UST facility site drawing

Attach detailed drawing or use the space provided to draw a sketch of the UST and CP systems. At a minimum you should indicate the following: All tanks, piping and dispensers; Location of anodes if known; All buildings and streets; Location of CP test stations; Each reference cell placement (local and remote) must be indicated by a code (e.g., 1,2, T-1,) corresponding with the appropriate test in Section 10 of this form. If supplemental anodes are added to the tank system, indicate number, size, location and depth of the new anodes. **An evaluation of the CP system is not complete without an acceptable site drawing.**

[Indicate North Here]